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| PPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------|----------------------|---------------------|------------------|
| 10/813,346 | 03/29/2004 | Osamu Kobayashi | GENSP151C1 | 5003 |
| 22434 7 | 590 12/13/2005 | EXAMINER | | |
| BEYER WEAVER & THOMAS LLP P.O. BOX 70250 | | | SHERKAT, AREZOO | |
| OAKLAND, CA 94612-0250 | | | ART UNIT | PAPER NUMBER |
| | | | 2131 | |

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--|---|------------------------------|--|--|--|--|
| | 10/813,346 | KOBAYASHI ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Arezoo Sherkat | 2131 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | j | | | | |
| 1) Responsive to communication(s) filed on 29 M | arch 2004 | | | | | |
| | action is non-final. | | | | | |
| • | | secution as to the merits is | | | | |
| Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| · | in parto quayro, 1000 G.B. 11, 10 | 0.0.210. | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-22 is/are pending in the application | 4)⊠ Claim(s) <u>1-22</u> is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-22</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | · · | | | | | |
| · _ | 8) Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Application Papers | · | | | | | |
| | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>29 March 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☑ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3/29/04. | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | | | | | |

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DETAILED ACTION

Claims 1-22 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over High-bandwidth Digital Content Protection System, Revision 1.0 by Intel Corporation and HDCP Revision 1.0 hereinafter), in view of Doiron et al., (U.S. Patent No. 5,481,610 and Doiron hereinafter).

Regarding claims 1, 4-5, 12, and 15-16, HDCP Revision 1.0 discloses a method of using a cryptographic key in a display device, comprising:

in a display device having a printed circuit board (PCB) and a master block, providing a key to the PCB by the master block (HDCP Revision 1.0, Pages 6-27).

HDCP Revision 1.0 does not expressly disclose encrypting the cryptographic keys before storing them.

However, Doiron discloses selecting one of a number of encryption protocols available to the PCB, encrypting the key based upon the selected encryption protocols, storing the encrypted key in a non-volatile memory by the PCB, decrypting the stored

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encrypted key, as needed, by the PCB based upon the selected encryption protocol (Col. 9, lines 53-67 and Col. 10-11, lines 1-67 and Col. 12, lines 1-30).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify teachings of HDCP Rvision 1.0 with teachings of Doiron because it would allow to include storing cryptographic keys in an encrypted form as disclosed by Doiron. This modification would have been obvious because one of ordinary skill in the art would have been motivated by the suggestion of Doiron to provide an arrangement for safeguarding the secrecy of encryption/decryption keys stored by a mobile/portable radio transceiver that does not require any additional hardware components or other costly additions to the transceiver architecture and yet provides flexibility in securely storing a large number of selectable different cryptographic keys (Doiron, Col. 3, lines 49-55).

Regarding claims 2-3 and 13-14, HDCP Revision 1.0 does not expressly disclose selecting one of the number of available encryption protocols for each of the provided keys, and encrypting each of the provided keys based upon a particular one of the selected encryption protocols.

However, Doiron discloses further comprising: selecting one of the number of available encryption protocols for each of the provided keys, and encrypting each of the provided keys based upon a particular one of the selected encryption protocols (i.e., different banks and/or keys can be used (Col. 5, lines 5-35 and Col. 7, lines 29-42).

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Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify teachings of HDCP Rvision 1.0 with teachings of Doiron because it would allow to include selecting one of the number of available encryption protocols to encrypt each of the provided keys as disclosed by Doiron. This modification would have been obvious because one of ordinary skill in the art would have been motivated by the suggestion of Doiron to provide an arrangement for safeguarding the secrecy of encryption/decryption keys stored by a mobile/portable radio transceiver that does not require any additional hardware components or other costly additions to the transceiver architecture and yet provides flexibility in securely storing a large number of selectable different cryptographic keys (Doiron, Col. 3, lines 49-55).

Regarding claims 6-9, 11, 17-20, and 22, HDCP Revision 1.0 discloses wherein the plurality of keys includes a decryption key and an authentication key (HDCP Revision 1.0, Pages 6).

Regarding claims 10 and 21, HDCP Revision 1.0 does not expressly disclose encrypting the cryptographic keys.

However, Doiron discloses retrieving an encrypted authentication key (i.e., encrypted cryptographic key) from the non-volatile memory corresponding to the authentication request (i.e., encrypted radio communication), and decrypting the

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authentication request based upon a corresponding decryption protocol (Col. 7, lines 29 – Col. 9, lines 30).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify teachings of HDCP Rvision 1.0 with teachings of Doiron because it would allow to include retrieving an encrypted authentication key (i.e., encrypted cryptographic key) from the non-volatile memory as disclosed by Doiron. This modification would have been obvious because one of ordinary skill in the art would have been motivated by the suggestion of Doiron to provide an arrangement for safeguarding the secrecy of encryption/decryption keys stored by a mobile/portable radio transceiver that does not require any additional hardware components or other costly additions to the transceiver architecture and yet provides flexibility in securely storing a large number of selectable different cryptographic keys (Doiron, Col. 3, lines 49-55).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arezoo Sherkat whose telephone number is (571) 272-3796. The examiner can normally be reached on 8:00-4:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Arezoo Sherkat Patent Examiner

Group 2131 Dec. 9, 2005 Cll Primay Examiner AUZIBI 12/12/05

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